

reproduction capabilities, video sink and display capabilities and both at least video and audio capture and reproduction capabilities and video sink and display capabilities; and

(c) a multimedia central office being in communication with the first premise network and being adapted for coupling to a public digital network, the multimedia central office, in use, transceiving audio, video and digital data signals for providing at least switching functions originating at or destined for at least one user workstation, to and from the first premises network to provide video communications services,

the central office further being coupled to at least one other workstation, not associated with the first premises network, and

the central office being configured to combine captured video images, of at least three users, into a mosaic image for reproduction at a workstation of at least one user.

Please add the following new claims:

17. (New) The system of claim 1 wherein the multimedia central office is operative to provide MM mail capabilities among said video communications services.

18. (New) The system of claim 1 wherein the multimedia central office is operative to accept a plurality of access protocols in said communication with the first premises network.

19. (New) The system of claim 1 wherein the multimedia central office is in communication with the first premises via unshielded twisted pair wiring operative to carry information using the Ethernet protocol.

20. (New) The system of claim 1 wherein the multimedia central office is operative to accept a plurality of user video compression protocols.

21. (New) The system of claim 1, wherein said system comprises a plurality of multimedia central offices, and a first multimedia central office and a second multimedia office are interconnected using the public digital network.

22. (New) The system of claim 21 wherein said mosaic image, comprising a plurality of captured video images, may be realized in one or more of said plurality of multimedia central offices.

23. (New) The system of claim 22 further comprising a resource allocation system, operative to provide automatically a designation of which one or more of said plurality of multimedia central offices realizes the mosaic image.

24. (New) The system of claim 23 where the resource allocation system makes said designation based on optimality conditions.

25. (New) The system of claim 24 wherein the optimality conditions take into account which system resources are currently active and which are currently free.

26. (New) The system of claim 1 wherein the mosaic image is created using pixel domain techniques.

27. (New) The system of claim 1 wherein the mosaic image is created using variable-length code word domain techniques.

28. (New) The system of claim 1 wherein the mosaic image is created using DCT domain techniques.

B² 29. (new) The system of claim 1 wherein the at least one other workstation is connected to the multimedia central office by wireless links.

30. (New) The system of claim 1, further comprising a distributed conference bridge, and wherein the mosaic image is created using said distributed conference bridge.

31. (New) The system of claim 1 wherein the multimedia central office is also operative to provide video close-ups in addition to the mosaic image.

32. (New) The system of claim 1 further comprising a conference bridge server, wherein the mosaic image is created within said conference bridge server with assignable input cells, output cells, and compositing cells.

33. (New) The system of claim 32 further comprising means for combining the input cells and output cells associated with a same user port into a common entity.

34. (New) The system of claim 1 wherein the multimedia central office is operative to provide data sharing services to the plurality of user workstations.

35. (New) The system of claim 1 wherein the multimedia central office is operative to provide application sharing services to the plurality of user workstations.

36. (New) The system of claim 1 wherein the multimedia central office is operative to provide conference recording services to the plurality of user workstations.

37. (New) The system of claim 36 wherein the multimedia central office provides synchronized audio, video, and graphics in captured and stored during conference recording for later playback.

B² 38. (New) The system of claim 1 wherein the multimedia central office is operative to provide a usage monitoring capability.

39. (New) The system of claim 38 wherein the usage monitoring provides information to a billing system.

40. (New) The system of claim 1 wherein the multimedia central office provides directory services to the plurality of user workstations.

41. (New) The system of claim 1 wherein the at least one other workstation is a home interactive TV endpoint.

42. (New) The system of claim 1 wherein the multimedia central office provides video on demand services to a plurality of the workstations with which it communicates.

43. (New) The system of claim 1 wherein the multimedia central office provides data visualization services.

44. (New) The system of claim 1 wherein the multimedia central office provides data sonification services.

45. (New) The system of claim 1 wherein the multimedia central office comprises information filters, said filters being operative to automatically select video clips to create a user-customized "video newspaper."

46. (New) The system of claim 1 wherein the multimedia central office provides video feeds into videogames.

47. (New) The system of claim 1 wherein the multimedia central office comprises shared codec banks.

B² 48. (New) The system of claim 1 wherein the multimedia central office provides at least one video communication service using service primitives.

49. (New) The system of claim 48 wherein the service primitives are designed to support evolvable video communications services.

50. (New) The system of claim 1 wherein the multimedia central office provides interfacing with third-party service providers.

51. (New) The system of claim 1 wherein the multimedia central office provides video communications services to a plurality of premises networks.

52. (New) The system of claim 51 wherein the multimedia central office accepts a plurality of access protocols in connecting with the plurality of premises networks.